DOCUMENT RESUME

ED 279 486 SE 047 745

AUTHOR Lee, LeRoy
TITLE Public Relations for a Science Education Program.
PUB DATE 14 Sep 86
NOTE 8p.; Paper presented at the United States-Japan Seminar on Science Education (Honolulu, HI, September, 1986).
PUB TYPE Speeches/Conference Papers (150) -- Viewpoints (120)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attitude Change; Curriculum Development; *Educational Planning; *Elementary School Science; Elementary Secondary Education; Models; *Public Relations; Science Education; *Secondary School Science; Systems Approach
IDENTIFIERS *Strategic Planning

ABSTRACT

Perceptions and attitudes have been identified as being influential components for the development of an effective precollege science education program. A carefully planned and implemented public relations program is advocated in this paper as a means of developing accurate perceptions and positive attitudes. The paper offers the process of strategic planning as a valuable model for the development of a public relations program. Reviewed are: (1) the advantages of strategic planning; (2) the steps involved in the process; (3) possible program goals; and (4) a scenario of how strategic planning which has public relations as a major goal might operate (providing two examples which consist of goals, objectives, and action plans). (ML)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED279486

PUBLIC RELATIONS FOR A SCIENCE EDUCATION PROGRAM

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

LeRoy Lee

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

LeRoy Lee

Executive Director

Wisconsin Academy of Sciences

Arts, and Letters

Madison, WI.

SE047 715

Paper presented at the United States-Japan Seminar on Science Education

East-West Center, University of Hawaii, Honolulu, Hawaii

September 14, 1986

BEST COPY AVAILABLE

The usual process of developing an effective precollege science education program is to first address the curriculum. The curriculum is evaluated and then either accepted, modified, or a new curriculum is written, adapted or adopted. Attention is paid to staff through selective hiring as vacancies occur and through periodic inservice. Facilities, equipment, and supplies that make up the support system are also reviewed and modified as necessary.

Curriculum, staff and support systems, however, are only three components of an effective program. Implementation and continued success is greatly influenced by the perceptions and attitudes about the program that people hold. For example, a program that students perceive as relevant and interesting will influence their attitude about the course and also about science in general. Programs perceived by policy makers as necessary, but not critical, will receive minimal support. To reach maximum effectiveness, the fourth component of a science education program, the perceptions and attitudes of people having a vested interest, must be addressed. Through a carefully planned and implemented public relations program, accurate perceptions and positive attitudes can be developed.

Developing a public relations program is not easy. This paper is not easy. This paper will address one way. It's a process called strategic planning. Traditional long range planning attempts to predict the future based on the present trends. In contrast, strategic planning is a process of planning that attempts to define and create a desirable future. It is based on the assumption that the future depends more on what you do between now and then, than what has happened up to now.

Strategic planning is participatory in nature where the people most involved in implementation are the ones developing the plans. Thus, the advantage of strategic planning for a science program is not just the vision of a desirable future and the plan on how to get there, but also the process of producing the plan.

The general process of strategic planning involves:

(1) reviewing and determining the purpose and goals of the present program;

(2) and developing an optimum scenario for a program.

This might include new goals such as:

(1) evaluating existing activities in terms of the optimum and the addition or deletion of activities as necessary;

(2) and determining a plan of action to include agreement of responsibilities, a financial plan, and evaluation.

Program goals and activities resulting from strategic planning should involve a public relations program. Attitudes and perceptions can be shaped by a carefully planned program that has the support of those doing the planning. Because there are many groups that are significant in the long term success of a science education program, public relations action plans should be developed for each identified group. Obvious groups are students, parents, administrators and school board members. Not so obvious are those groups that have significant community influence in communicating perceptions and in developing attitudes. Some examples are service organizations, businesses, agencies, religious groups, and realtors.

To be more specific, let me develop a scenario of how strategic planning including public relations as a major goal might operate:

(1) A high school science department decides to strategically plan for the future. After considerable discussion and agreement on the purpose

of the science program, goals that would produce a desirable future are developed. All goals receive consensus support. Some goals identified include-

-the number of minority students in science will be above the state level in ten years.

-the number of female students in science will be above the state level in ten years.

-student attitudes toward science will be above the state level in ten years. (This goal will be developed for the scenario.)

(2) Present programs are discussed in terms of goals. Activities presently in place that are counter-productive to these goals are identified. Data are collected to establish an evaluation base.

(3) Departmental discussions identified the students to be targeted. One strategy developed was to target entering ninth grade students. Objectives and action plans are developed to influence student perceptions and attitudes. Desired states are identified as: students who think of the courses as enjoyable, have confidence that they will succeed, and feel that the staff is concerned for them as individuals.

(4) A departmental brainstorming session identifies many objectives that will lead to the goal of developing a positive attitude in the target group. Because ninth grade students have many concerns the first few days of school, several objectives are written to alleviate these concerns. The assumption is that the action plan will lead to an initial positive attitude. It is understood that additional activities will be needed throughout the year to sustain the attitude. One objective selected is "at the end of the first week of school, 80% of the ninth grade students will indicate that science will probably be their favorite class this year."

(5) A plan of action is discussed. The first step involves a survey of ninth grade students to identify the concerns that the science department can address. Concerns expressed most often by students can be grouped as:

-How will I find my classroom? If I can't, will I be embarrassed when I come late?

-Will I like my teacher? Will she/he like me?

-I'm alone. I won't be with my friends. How will I make new friends?

-Will I be able to succeed in this class?

(6) From these concerns, the department develops written, long term action plans.

Examples of two such action plans follow:

Example 1

Goal: Student attitude about science will be above the state level in ten years.

Objective: At the end of the first week of school, 80% of the ninth grade students will indicate that science will probably be their favorite class this year.

Action:

(1) Teachers, on the first day, will express empathy about finding your way in a strange building and the embarrassment of coming late to class. Responsibility: 9th grade staff.

(2) Students will be assured that while being on time is important in the class, during the first week it is understandable if some are late. Responsibility: 9th grade staff.

(3) Students will be asked about their next class and directions will be given if needed. If possible, some upper class students will come to the room to help students find their next class. Responsibility: 9th grade staff; advanced courses staff.

Example 2

Goal: Student attitudes concerning science will be above the state level in ten years.

Objective: At the end of the first week of school, 80% of the ninth grade students will indicate that science will probably be their favorite class this year.

Action:

(1) A lab will be developed for the first day of class which will be manipulative, involve a team of two or three students, have a high interest/curiosity level, require observation and prediction, and easily recorded by students and graded by teachers. Responsibility: chemistry and physics staff.

(2) This lab will be the only first day activity. Seat assignments and other administrative details will be postponed until later in the week.

(3) The lab reports will be collected, graded, and returned the next day. It is assumed that because the lab is primarily observation, all students will experience success.

Evaluation of Objective:

(1) An easily administered questionaire will be developed to assess what ninth grade students feel will be their favorite class. Responsibility: Department Chair.

(2) The questionaire will be administered at the start of the second week of school. Responsibility: 9th grade staff.

(3) The department will discuss the results of the questionaire and the perceptions of the staff. Based on this, activities will be modified for the following year as needed.

From such a scenario as described, one would expect that the goals would be reached.

Attitudes and perceptions are the important fourth component of a science program. A systematic plan to ensure accurate perceptions and positive

attitudes of all those having influence on the program, can only enhance the effectiveness of a science program.

-30-